

AMENDMENTS TO THE CLAIMS

Please cancel claims 1-84, and add new claims 85-95 as follows:

1-84. (Cancelled)

85. (New) A method for detecting a defect at a region on a surface of a substrate and for discriminating between particle defects and subsurface defects, the method comprising:

directing a first beam of light to impinge at said region on the surface at a first incident angle;

collecting scattered light caused by the first beam over a predetermined area and integrating the intensities of the scattered light over said area to form a first integrated response;

directing a second beam of P-polarized light to impinge at said region on the surface at a second incident angle which is greater than the first incident angle;

collecting scattered light caused by the second beam over said area and integrating the intensities of the scattered light over said area to form a second integrated response; and comparing the first and second integrated responses to determine whether a defect is a particle or a subsurface defect.

86. (New) The method of claim 85, wherein the second beam is directed at an incident angle of about 45-85 degrees relative to a normal to the surface.

87. (New) The method of claim 85, wherein the scattered light is collected over a range of angles from negative to positive to a plane normal to the surface.

88. (New) The method of claim 85, wherein the steps of collecting the scattered light comprise using a wide angle collector to collect the light.

89. (New) The method of claim 85, wherein the steps of collecting the scattered light and integrating the scattered light intensities comprise capturing the scattered light over the predetermined area and focusing the captured light onto a detector operable for measuring light intensity.

90. (New) A method for detecting a defect at a region on a surface of a substrate and for discriminating between particle defects and subsurface defects, the method comprising:

Attorney Docket No.: TNCR.152US7

directing a beam of light to impinge at said region on the surface at a predetermined incident angle;

collecting scattered light caused by the beam at a plurality of locations over a wide angular range and integrating the intensities of the scattered light from said locations to form a first integrated response;

directing a beam of S-polarized light to impinge at said region on the surface at the predetermined incident angle;

collecting scattered light caused by the S-polarized beam at said locations and integrating the intensities of the scattered light from said locations to form a second integrated response; and

comparing the first and second integrated responses to determine whether a defect is a particle or a subsurface defect.

91. (New) The method of claim 90, wherein the scattered light is collected over a range of angles from negative to positive relative to a plane normal to the surface.

92. (New) The method of claim 90, wherein the steps of collecting the scattered light comprise using a wide angle collector to collect the light.

93. (New) The method of claim 90, where the steps of collecting the scattered light and integrating the scattered light intensities comprise capturing the scattered light over the wide angular range and focusing the captured light onto a detector operable for measuring light intensity.

94. (New) An apparatus for detecting a defect at a region on a surface of a substrate and for discriminating between particle defects and subsurface defects, the apparatus comprising:

at least one light source operable to create a first beam of light and direct the first beam onto the region of the substrate surface at a first incident angle, and operable to create a second beam of P-polarized light and direct the second beam onto the region of the substrate surface at a second incident angle greater than the first incident angle;

a collection system positioned above the substrate surface for receiving light scattered from the surface to a plurality of locations distributed over a range of angles above the substrate surface, the collection system being operable for integrating intensities of the scattered light over said plurality of locations to produce total integrated response signals corresponding to the first light beam and the second P-polarized light beam; and

Attorney Docket No.: TNCR.152US7

a processor in communication with the collection system and operable for comparing the total integrated response signal caused by the first P-polarized light beam with the total integrated response signal caused by the second P-polarized light beam to determine whether a defect is a particle or a subsurface defect.

95. (New) The apparatus of claim 94, wherein the collection system includes at least one wide angle collector.